Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1.-37. (Canceled).

38. (Currently Amended) ~~The use of~~ An underwater buoyancy element, comprising:

a buoyancy fluid ~~presenting~~ having a density that is less than that of sea water, and that is confined in a rigid or flexible leaktight casing, ~~so as to constitute an immersed buoyancy element,~~ wherein said buoyancy fluid is a compound that is naturally in ~~the~~ a gaseous state at ambient atmospheric temperature and pressure, and in ~~the~~ an entirely liquid state at the underwater depth to which said buoyancy element is immersed.

39. (Currently Amended) ~~A use~~ The underwater buoyancy element according to claim 38, wherein said buoyancy fluid is naturally in ~~the~~ a stable liquid state when it is placed at an underwater depth of 10 m to 500 m~~, and preferably of 20 m to 100 m~~.

40. (Currently Amended) ~~A use~~ The underwater buoyancy element according to claim 38, wherein said buoyancy fluid is a fluid that is quasi-incompressible, and that ~~presents~~ has a relative density in ~~the~~ a liquid state of 0.3 to 0.8~~, and preferably of 0.5 to 0.7~~.

41. (Currently Amended) ~~A use~~ The underwater buoyancy element according to claim 38, wherein said gas is selected from ammonia, a C-2 to C-7 alkane, a C-2 to C-7 alkene, a C-2 to C-7 alkyne, and a C-4 to C-7 diene.

42. (Currently Amended) ~~A use~~ The underwater buoyancy element according to claim 41, wherein said compound is selected from one of ~~the list:~~ ammonia, ethane, butane, propane, ethylene, propylene, butene, acetylene, methyl acetylene, propadiene, and butadiene.

43. (Currently Amended) ~~A use~~ The underwater buoyancy element according to claim 42, wherein said compound is selected from one of ammonia, propane, and butane.

44. (Currently Amended) ~~A use~~ The underwater buoyancy element according to claim 38, wherein said casing comprises walls defining an immersed structure, or is disposed in ~~is constituted by, or is placed inside, the walls of~~ a compartment of an immersed structure.

45. (Currently Amended) ~~A use~~ The underwater buoyancy element according to claim 38, wherein said casing is ~~placed~~ disposed outside and coupled to an immersed structure ~~to which it is connected or secured~~.

46. (Currently Amended) ~~A use~~ The underwater buoyancy element according to claim 45, wherein said immersed structure is suspended from said buoyancy element by at least one cable.

47. (Currently Amended) ~~A immersed~~ The underwater buoyancy element according to claim 38, wherein said buoyancy element imparts ~~imparting~~ buoyancy to an immersed structure to which it is connected or secured, or in which it is integrated~~, said buoyancy element comprising a said immersed casing in which said liquefied compound is confined in leaktight manner in accordance with the use of claim 38~~.

48. (Currently Amended) [[A]] The underwater buoyancy element according to claim 47, further comprising a flexible casing~~, preferably~~ having a hydrodynamic profile[[,]] for minimizing forces during [[its]] vertical movements of the underwater buoyancy element when the underwater buoyancy element [[it]] is full of said buoyancy fluid ~~as defined in claim 38~~.

49. (Currently Amended) A method of putting a buoyancy element ~~according to claim 47~~ into place between the surface and the bed of the sea, the method comprising:

~~wherein said fluid is stored~~ storing a buoyancy fluid in a tank on a surface ship as a liquid in ~~the~~ a cooled or compressed state, the buoyancy fluid having a density that is less than that of sea water and comprising a compound that is naturally in a gaseous state at ambient atmospheric temperature and pressure, and in a liquid state at the underwater depth to which said buoyancy element is immersed;

~~and it is injected~~ injecting the buoyancy fluid in the liquid state into a pipe that extends from the surface ship to an immersed casing ~~where it is~~ and in storing ~~stored to a said an~~ the immersed casing at an underwater depth at which the underwater pressure is not less than the vapor pressure of the ~~gas corresponding to said~~ compound in the gaseous state at the ambient temperature at said depth.

50. (Currently Amended) [[A]] The method according to claim 49, wherein said casing is a flexible casing that is lowered to the desired depth empty, in a folded state.

51. (Currently Amended) [[A]] The method according to claim 49, wherein said casing is prefilled, at atmospheric pressure and temperature, with sea water or ~~with another~~ other incompressible fluid, ~~preferably an incompressible liquid compound such as gas oil, fresh water, or methanol, and the sea water or said other liquid is~~ the sea water or other incompressible fluid being discharged from the casing as the casing is filled ~~it fills~~ with said buoyancy fluid ~~as defined in claim 38~~.

52. (Currently Amended) [[A]] The method according to claim [[51]]49, wherein said casing is prefilled with sea water and methanol to prevent~~, and before it is filled with a said buoyancy fluid, a limited quantity of methanol is injected, since methanol is suitable for preventing~~ the formation of hydrates before the casing is filled with the buoyancy fluid.

53. (Currently Amended) [[A]] The method according to claim [[51]]49, wherein said casing is filled at the surface with a fluid other than the buoyancy ~~said other~~ fluid, and ~~said casing filled in this way is~~ then lowered to a depth at which the hydrostatic pressure corresponds to the pressure at which said buoyancy fluid is subsequently injected into said casing with said other fluid being discharged.

54. (Currently Amended) [[A]] The method according to claim 49, wherein said buoyancy fluid is stored as a liquid in the cooled state in a cryogenic tank and at atmospheric pressure, and it is injected in ~~the~~ a pressurized liquid state into said immersed casing at a pressure corresponding to the hydrostatic pressure at the depth of said immersed casing, said buoyancy fluid passing through a heat exchanger so that the temperature of said buoyancy fluid is brought substantially to that of the sea water at the depth of said immersed casing prior to filling said casing.

55. (Currently Amended) A device for stabilizing or controlling the lowering or raising of a structure between the surface and the bed of the sea, said structure including or being connected to a buoyancy element according to claim 47, said device comprising: ~~including~~

at least one connection element of the cable or chain type, comprising: ~~having:~~

a first end that is connected to a winch on board a floating support or ship on the surface of the sea, and on which the connection element ~~winch it~~ is wound; and

a second end that is connected to a fastener element on said structure, or on ~~at least a~~ the ~~first~~ buoyancy element ~~according to claim 47~~ that is connected to said structure; and

wherein the length of said connection element is such that said winch is capable of winding or unwinding said first end of said connection element, so that a bottom portion of said connection element can hang beneath said fastener element.

56. (Currently Amended) [[A]] The device according to claim 55, ~~including~~ further comprising at least two of said connection elements, with corresponding ~~said~~ fastener elements

~~preferably~~ being disposed symmetrically, respectively around and on the periphery of said structure.

57. (Currently Amended) [[A]] The device according to claim 55, wherein said connection element ~~is constituted by~~ comprises a cable having a bottom portion coupled to a string of weighting blocks ~~that comprises weighting blocks disposed in a string on a said cable~~, said weighting blocks ~~preferably being~~ comprising metal blocks ~~secured~~ coupled to said cable by clamping.

58. (Currently Amended) [[A]] The device according to claim 57, wherein said weighting blocks ~~present~~ have a shape such that when said bottom portion hanging beneath said fastener elements curves, two of said blocks disposed side by side are capable of coming into abutment against each other, thereby limiting the curvature of said cable.

59. (Currently Amended) [[A]] The device according to claim 58, wherein the curvature of said cable is limited so that the minimum radius of curvature of said ~~cables~~ cable at said bottom portion enables a minimum distance to be maintained between said cable and said structure that is sufficient to prevent any mechanical contact between them while said structure is being lowered or raised.

60. (Currently Amended) [[A]] The device according to claim 57, wherein each of said weighting blocks ~~present~~ comprise a cylindrical central portion disposed between two frustoconical ends having axes that correspond to the direction of said cable when said cable is

disposed linearly, two adjacent blocks being in contact at said frustoconical ends along a generator line of said frustoconical ends in the curved parts of said bottom portion.

61. (Currently Amended) [[A]] The device according to claim 55, wherein said connection element comprises a chain having a bottom portion that comprises links that are heavier and larger than the links of the rest of the chain, ~~and that are preferably larger~~ so as to limit any curvature of the chain.

62. (Currently Amended) [[A]] The device according to claim 55, wherein said ~~first~~ buoyancy element is ~~elements are~~ disposed above said structure.

63. (Currently Amended) [[A]] The device according to claim 55, wherein said structure includes another ~~second~~ buoyancy element ~~elements, preferably according to claim 47,~~ that ~~are~~ is integrated in said structure~~, and more preferably integrated~~ above said fastener ~~element(s)~~ element so that the center of gravity of said structure together with said ~~first~~ buoyancy element ~~elements according to claim 47~~ is situated below the center of thrust that is exerted both on said structure and on said ~~first~~ buoyancy element ~~elements according to claim 47~~.

64. (Currently Amended) A method of lowering, raising, or stabilizing a structure between the surface and the bed of the sea by means of a device according to claim 55, said method comprising the following steps:

unwinding or winding ~~each~~ the at least one connection element at its first end by means of a said winch; and

controlling the speed at which ~~each~~ the at least one connection element is lowered or raised by regulating the speed at which ~~each~~ the at least one connection element is respectively wound off or on said winch, so as to adjust the length of said bottom portion of said at least one connection element hanging beneath said fastener element,

wherein the lowering, raising, or stabilizing of said structure ~~being~~ is obtained when the sum of the weight of the fraction of said bottom ~~portion(s)~~ portion of the at least one connection ~~element(s)~~ element between ~~firstly said~~ a fastener point ~~point(s)~~ for fastening to said fastener ~~element(s)~~ element and ~~secondly~~ the lowest point of said bottom ~~portion(s)~~ portion, plus the weight of said structure as a whole and of said ~~first~~ buoyancy ~~element(s)~~ element ~~according to claim 47~~, is respectively greater than, less than, or equal to the buoyancy thrust that is exerted on said structure and on said ~~first~~ buoyancy ~~element(s)~~ element ~~according to claim 47~~.

65. (Currently Amended) [[A]] The method according to claim 64, wherein said structure is a rigid structure of steel, other metal, or composite synthetic material containing ~~at least one and preferably~~ a plurality of leaktight buoyancy compartments that are suitable for forming ~~a said~~ buoyancy elements ~~element according to claim 47~~, with each of said compartments being fitted with at least one filling orifice and ~~preferably~~ with at least one emptying orifice, said leaktight compartments ~~preferably~~ being distributed symmetrically in said structure.

66. (Currently Amended) [[A]] The method according to claim 64, wherein said structure is a massive structure ~~constituted by~~ comprising an open-based receptacle in the form of a cap, the receptacle comprising a peripheral side wall surmounted by a roof wall and being

suitable for completely covering a wreck of a ship on the sea bed in order to recover polluting effluent escaping therefrom, said receptacle having at least one emptying orifice for discharging said effluent contained in the inside volume of said receptacle; said emptying orifice ~~preferably~~ being ~~situated in~~ disposed on the roof of the receptacle.

67. (Currently Amended) [[A]] The method according to claim 65, wherein said structure ~~receptacle~~ is ~~constituted as~~ comprises an upside-down double-walled ship hull, said leaktight compartments being defined by spaces between said double walls and by structural elements interconnecting the double walls.

68. (Currently Amended) [[A]] The method according to claim 64, wherein the ~~rigid~~ structure includes hollow tubular bars defining leaktight compartments and forming ~~said~~ buoyancy elements ~~according to claim 47~~.

69. (Currently Amended) [[A]] The method according to claim 64, wherein said structure is fitted on the outside[[:]] with fastener elements enabling ~~said~~ buoyancy elements and ~~said~~ cables or ~~said~~ chains to be secured thereto for lowering said structure from the surface of the sea, ~~and for~~ putting it into place, and~~, where appropriate,~~ anchoring [[it]] the structure to the sea bed; and

~~preferably~~ with ~~thrusters, more preferably~~ steerable thrusters enabling said structure to be moved in a horizontal direction in order to position it.

70. (Currently Amended) [[A]] The method according to claim 64, further comprising the following steps:

[[1)]] filling ~~said~~ leaktight compartments disposed in or on the structure completely or partially with a ~~said~~ buoyancy fluid~~, so as~~ to ~~constitute~~ produce [[a]] buoyancy elements ~~element according to claim 47~~, ~~with the extent to which~~ said leaktight compartments ~~are filled~~ being adjusted ~~so as~~ to cause said structure to occupy an equilibrium position when immersed close to the surface of the sea;

[[2)]] lowering said structure to the desired position by means of a device according to claim ~~53~~ 55 for controlling lowering, so as to regulate the speed at which the ~~receptacle~~ structure is lowered, and so as to provide equilibrium to the base of said substantially horizontal structure while it is being lowered; and

[[3)]] once said structure is immersed to the desired depth, emptying said leaktight compartments filled with fluid lighter than sea water that is recovered at the surface, and simultaneously filling said leaktight compartments with sea water.

71. (Currently Amended) [[A]] The method according to claim 70, wherein,

~~in step 1),~~ additional buoyancy is provided to said structure by means of ~~said first buoyancy elements consisting of~~ additional floats connected to said structure ~~receptacle~~; and

~~in step 3),~~ once said structure is in the underwater position at the desired depth, said additional floats are detached.

72. (Currently Amended) [[A]] The method according to claim 70, further comprising ~~wherein, after step 1) and before step 2),~~ once said structure has reached an ~~the desired~~

equilibrium position~~, in particular~~ in the vicinity of the sea bed, ~~the~~ reducing lengths of ~~said~~ heavy stabilizing cables [[(]]or chains[[)]] hanging beneath said fastening elements ~~are reduced so as~~ to stabilize said structure in suspension, ~~and~~

~~where appropriate,~~ anchoring said structure ~~is anchored~~ to the sea bed, and ~~then~~

fully lowering said heavy stabilizing cables [[(]]or chains[[)]] ~~are fully lowered~~ so that their entire weight contributes to stabilizing said structure.

73. (Currently Amended) [[A]] The method according to claim 72, further comprising ~~wherein~~,

~~in step 1),~~ filling said leaktight compartments ~~compartment(s) or casing(s)~~ connected to said structure ~~are filled~~ with sea water or with a first fluid that is lighter than sea water; and

~~in step 2),~~ lowering said structure ~~is lowered~~ to a depth of 30 m to 60 m corresponding to a pressure of 3 bars to 6 bars, at which depth a buoyancy fluid~~, as defined in claim 38,~~ consisting of a liquefied gas that is lighter than sea water is injected under pressure into said leaktight compartments ~~compartment(s) or casing(s)~~ from a gas tanker ship on the surface~~, so as~~ to ~~constitute a~~ buoyancy elements ~~element according to claim 47~~.

74. (Currently Amended) A method of recovering polluting effluent that is lighter than sea water, as contained in the tanks of a shipwreck lying on the sea bed, ~~in which~~ the method comprising:

[[1)]] putting a ~~said~~ receptacle ~~is put~~ into place in accordance with the method of claim 66; and

[[2)]] collecting the effluent recovered inside said receptacle ~~is collected~~ by bei~~ng~~ ~~emptied~~ emptying the effluent ~~out~~ through said top emptying orifice.